

WE CLAIM:

*Substantive*

1. A flying insect trap, that uses reflected and radiated insect attractant light, which trap comprises:

- (a) a source of insect attractant light; and
- (b) a housing for the source, the housing

comprising:

(i) a placement means;

(ii) a reflecting surface, operably attached to the mounting means positioned, at an angle to the horizontal surface of less than 90°, such that light from the source is directed onto the

vertical surface; and

(iii) an insect immobilization surface operably attached to the mounting means;

wherein the housing is configured such that the housing comprises an upwardly facing opening for insect entry.

2. The trap of claim 1 wherein the insect attractant light comprises at least one source of ultraviolet light.

3. The trap of claim 1 wherein the insect immobilization surface comprises an adhesive surface.

4. The trap of claim 1 wherein the insect immobilization surface comprises a lethal surface.

5. The trap of claim 1 wherein the trap additionally comprises an insect attractant.

6. The trap of claim 5 wherein the attractant comprises a pheromone.

7. The trap of claim 2 wherein the reflecting surface is planar and comprises a shiny metallic surface.
8. The trap of claim 4 wherein the insect immobilization surface comprises an electrified surface lethal to the insect.
9. A flying insect trap using reflected and radiated insect attractant light, which trap comprises:
- (a) a source of insect attractant light;
  - (b) a one piece housing that on a vertical surface surrounds the source, the housing comprising a base horizontal portion and an angled portion, wherein the angled portion extends from the base portion at an angle of about 45°-75° from the horizontal surface; and
  - (c) an insect immobilization surface
- wherein the housing contains a reflecting surface to direct light from the source onto the vertical surface and wherein the housing is configured such that when mounted on the vertical surface the trap has an upwardly facing opening.
10. The trap of claim 9 wherein the attractant light comprises at least one source of ultraviolet light.
11. The trap of claim 9 wherein the insect immobilization surface comprises an adhesive surface.
12. The trap of claim 10 wherein the trap also comprises an insect attractant.
13. The trap of claim 12 wherein the attractant is a pheromone.

- 13  
14. The trap of claim 10<sup>9</sup> wherein the source<sup>5</sup> is two or more fluorescent source of ultraviolet light.
- 14<sup>15</sup> 15. The trap of claim 9<sup>8</sup> wherein the reflecting surfaces comprise a metallic reflective surface.
- 5 15<sup>16</sup> 16. The trap of claim 9<sup>8</sup> wherein the trap additionally comprises an insecticide.
- Sub a 3* 17. A flying insect trap using reflected insect attractant light, which trap comprises a vertical surface, a housing containing a means to mount the housing on the vertical surface, an insect immobilization surface and a source of insect attractant light wherein the housing is configured such that when mounted on the vertical surface, the source cannot be directly viewed and the housing contains a surface at an angle to the horizontal surface of less than 80° which reflects light from the source onto the vertical surface, and the trap has an upwardly facing opening.
- 17<sup>18</sup> 18. The trap of claim 17<sup>16</sup> wherein the insect attractant light comprises a source of ultraviolet light.
- 20 19<sup>19</sup> 19. The trap of claim 17<sup>16</sup> wherein the insect immobilization surface comprises an adhesive surface.
- 19<sup>20</sup> 20. The trap of claim 17<sup>16</sup> wherein the insect immobilization surface comprises a surface lethal to the insect.
- 25 20<sup>21</sup> 21. The trap of claim 19<sup>18</sup> wherein the trap also comprises an insect attractant pheromone.

21 16  
22. The trap of claim 17 wherein the reflecting surface comprises a shiny metallic surface.

D 23. The trap of claim 1 wherein the trap is mounted on a vertical surface and the trap has a contrasting color.

5 23-24. The trap of claim 5 wherein the trap is mounted on a vertical surface and the trap has a contrasting color.

24 25. The trap of claim 16 wherein the trap is mounted on a vertical surface and the trap has a contrasting color.

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